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10/607,832	06/27/2003	Kari Tapani Hjelt	NOKM.033PA	8451
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CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE, SUITE 390 ST. PAUL, MN 55120			PEACHES, RANDY	
			ART UNIT	PAPER NUMBER
			2686	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,832

Applicant(s)

HJELT ET AL.

Examiner

Randy Peaches

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/06/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. ***Claims 1, 5-11, 13, 16, 22-27, 29-35, 37-39 and 41*** are rejected under 35 U.S.C. 102(e) as being anticipated by Becker et al. Patent Publication Number (U.S. 2004/0127255 A1).

Regarding ***claims 1, 16 and 30***, Becker et al. discloses a multi-media device (16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);

Art Unit: 2686

- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

Regarding **claim 5**, according to **claim 1**, Becker et al. continues to disclose a substrate housing one or more sensor elements, the said memory (22) and the said electrical contacts. See Becker et al. FIGURES 1 and 2.

Regarding **claim 6**, according to **claim 1**, Becker et al. continues to disclose a housing to encapsulate the said substrate. See FIGURE 1.

Regarding **claims 7, 31 and 32**, according to **claims 1 and 30**, wherein Becker et al. further discloses the sensor interface circuitry comprises a said MCU (30) coupled to the said multi media interface (18), wherein the said MCU (30) is configured to enable access to the memory by both the sensor interface circuitry to the said memory. See FIGURE 2 and paragraph [0031].

Regarding **claims 8 and 29**, according to **claims 7 and 16**, wherein Becker et al. further teach in paragraph [0005] of a DMA controller capable of facilitating DMA transfer from a device to a memory.

Regarding **claim 9**, according to **claim 1**, wherein Becker et al. further discloses the digital interface comprises a short range wireless interface for wirelessly coupling the memory and sensor data to the host process operating on the mobile communication device. See paragraph [0019].

Regarding **claim 10**, according to **claim 1**, wherein Becker et al. further discloses the short range wireless interface comprises any of a Bluetooth interface and an infrared (IR) interface. See paragraph [0019].

Regarding **claim 11**, according to **claim 9**, Becker et al. further teaches in paragraph [0019] wherein the short-range wireless interface is further wirelessly coupled to one or more radio frequency (RF)-enabled sensor devices to receive respective sensor data from the RF-enabled sensor devices.

Regarding **claim 13**, according to **claim 1**, Becker et al. disclose wherein the sensor interface circuitry comprises means for conditioning the sensor data for storing in the said memory. See paragraph [0039].

Regarding **claim 22**, according to **claim 16**, Becker continues to disclose removably coupling the one or more sensors modules and the memory to the said portable electrical device (PED). See FIGURE 1.

Regarding **claim 23**, according to **claim 22**, Becker et al. continues to disclose wherein removably coupling the one or more sensor modules and the memory to the mobile communication device comprises connecting the one or more sensor modules and the memory to one or more connector slots on the mobile communication device. See FIGURE 1.

Regarding **claim 24**, according to **claim 16**, Becker et al. continues to disclose wherein disconnecting the host process of the said PED from the memory, and storing the sensor data from the one or more sensor modules into the memory when the one or more sensor modules and the memory are disconnected from the host process of the said PED. See paragraph [0034].

Regarding **claim 25**, according to **claim 16**, Becker et al. continues to disclose in paragraph [0002], wherein storing sensor data from a sensor module into the memory comprises storing at least some of the sensor data from one or more sensor modules into the memory before coupling the host process of the mobile communication device to the memory.

Regarding **claim 26**, according to **claim 16**, Becker et al. continues to disclose in paragraph [0002], wherein storing sensor data from a sensor module into the memory comprises storing at least some of the sensor data from one or more sensor modules into the memory after coupling the host process of the mobile communication device to the memory. The Examiner would like to clarify that the information contained in the said MMD, will continue to be stored within until a command to retrieve the information is sent. Therefore, this occurrence satisfies the Applicant's above limitation in that the information is still contained within the said MMD after the said MMD is mated with the said PED. See paragraphs [0021 and 0023].

Regarding **claim 33**, according to **claim 30**, Becker et al. discloses in paragraph [0013] wherein the said MMD (16) comprises a sensor interface coupled to one or more sensors and to a CPU, which reads on claimed "modular memory," to facilitate storing of the sensor data in the modular memory via the digital interface.

Regarding **claim 34**, according to **claim 33**, Becker et al. discloses in FIGURE 2, wherein the said PED comprises a processor for executing the master process, and wherein the processor executing the master process is configured to access the sensor data from the MMD (16) memory via the digital interface.

Art Unit: 2686

Regarding **claim 35**, according to **claim 34**, Becker et al discloses in FIGURE 2 and paragraph [0019], wherein a bridge, via wireless or wired, coupled between the processor for executing the master process and the modular memory to manage memory accesses to and from the module memory by the master process and the modular sensor functionality.

Regarding **claims 27 and 37**, according to **claim 30**, Becker et al. discloses in paragraph [0013] the digital interface comprises a said MMD (16), which reads on claimed "MultiMedia Card (MMC)," interface, and wherein the modular memory comprises an said MMD-compliant memory card.

Regarding **claim 38**, according to **claim 30**, Becker et al. discloses in FIGURE 1 and paragraph [0014], wherein a mobile phone engine operable to control communications over a cellular network.

Regarding **claim 39**, Becker et al. discloses in paragraph [0013, 0014 and 0019] a portable electronic device (PED), which reads on claimed "mobile device," scalable sensor system and capable of communicating wirelessly over a mobile communications network, the mobile device comprising:

- a processor (MCU, 30) configured to execute a host process. See paragraph [0018];

Art Unit: 2686

- at least one modular card having sensor functionality implemented thereon to gather sensor data. See paragraph [0022];
- one or more slots for receiving the modular cards. See FIGURE 1; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

Regarding **claim 41**, according to **claim 39**, Becker et al. discloses in paragraphs [0014 and 0022], wherein the said PED comprises a mobile phone or a personal digital assistant (PDA).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 2-3, 28, 36 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Mault Patent Publication Number (U.S. 2003/0126593 A1).

Regarding **claims 2, 28 and 40**, according to **claims 1, 16 and 39**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

Art Unit: 2686

However, Becker et al. fails to clearly disclose wherein an external memory also implementing the digital interface to facilitate mapping of the sensor data into a defined portion of the external memory, wherein the host process receives the sensor data via the defined portion of the external memory.

Mault discloses a means by which a monitor module via a digital interface is able to transfer sensed data to the memory module interface of a remote control, which then in turn, sends the information to a remote host according to the sensed data in each of the defined memory locations.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Mault Patent Publication Number (U.S. 2003/0126593 A1) in order to facilitate a method to transfer information from the said MMD to an external memory which further files the information in defined portions of the said memory.

Regarding **claim 3**, as the combination of Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) and Mault Patent Publication Number (U.S. 2003/0126593 A1) are made, the combination according to **claim 2**, Mault continues to disclose wherein the defined portion of the said external memory's control applications for the interactive TV and remaining portions of the external memory allows the host process to access the sensor data and other non-sensor data respectively. See Mault's paragraph [0061, 0058 and 0046].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Mault Patent Publication Number (U.S. 2003/0126593 A1) in order to facilitate a method to transfer information from the said MMD to an external memory which further files the information in defined portions of the said memory.

Regarding **claim 36**, according to **claim 30**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on

the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

However, Becker et al. fails to disclose wherein host process is detached from the sensor functionality, and wherein the modular sensor functionality operates in a stand-alone mode to write the sensor data to the modular memory for subsequent retrieval by the mobile communication device when the mobile communication device is re-attached to the sensor functionality.

Mault teaches in FIGURE 3 and paragraphs [0046 and 0047] wherein the said monitoring unit is storing information regarding a patient as the patient sits, which reads on claimed " wherein the modular sensor functionality operates in a stand-alone mode to write the sensor data to the modular memory for subsequent retrieval by the mobile communication device when the mobile communication device is re-attached to the sensor functionality."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Mault Patent Publication Number (U.S. 2003/0126593 A1) in order for the sensor system is able to operate in a stand alone mode from the said mobile device.

3. **Claims 4, 12, 14-15 and 17-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1).

Regarding **claim 4**, according to **claim 1**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

However, Becker et al. fails to clearly disclose wherein the housing comprises a power source to provide power to the sensor card to allow the sensor data to be stored in the memory when the sensor card is housed within the housing.

Arnouse teaches in paragraphs [0023, 0026, 0027, 0068] wherein the scanner, playback/sending unit, or ID card reader, hereinafter "housing", which reads on claimed "housing," is able to provide power to the said peripheral card to allow data to be transferred to the external memory when the card is attached to the said housing.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to power the said card when placed on or near a said housing to facilitate the transfer of information.

Regarding **claim 12**, according to **claim 1**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and

Art Unit: 2686

- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

However, Becker et al. fails to clearly teach of digital interface comprising at least one of a serial interface, an MMC interface, a Serial Peripheral Interface (SPI), RS-232 interface, I.sup.2C interface, and Universal Serial Bus (USB) interface.

Arnouse teaches in paragraph [0018] wherein a host device is able to interface with the said reader via a USB.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to transfer information via a USB.

Regarding **claim 14**, according to **claim 1**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

Art Unit: 2686

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

However, Becker et al. fails to clearly teach wherein the sensor interface circuitry comprises an interface module coupled to the one or more sensors to receive analog sensor data and to provide digital representations of the analog sensed data.

Arnouse teaches in paragraph [0095] wherein the a reader allows the display of data on to a screen or handheld reader with an LCD, which reads on claimed "provide digital representations of the analog sensed data."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796

Art Unit: 2686

A1) in order to provide a means to display sensed data to a user digitally using a said LCD screen.

Regarding **claim 15**, according to **claim 1**, Becker et al. discloses a multi-media device (MMD, 16) or circuit card (12-2)(See paragraph [0013]), which reads on claimed "sensor card," wherein a sensor card is interpreted by the Examiner as a device capable of receiving and responding to a signal or a stimulus (See paragraph [0019]), comprising;

- one or more sensors to respectively collect sensor data, wherein as disclosed by Becker et al., the sensed data can either be in the form of audio tones, games, pictures, video, etc. See paragraph [0020];
- a memory (22);
- electrical contacts (FIGURE 1), which reads on claimed "sensor interface circuitry," coupled to the one or more sensors to receive the sensor data and to store the sensor data in the memory (22). See paragraph [0017 and 0013]; and
- a multi media interface (18), which reads on claimed "digital interface," configured for connection to a corresponding digital interface on a portable electronic device (PED, 10), which reads on claimed "mobile communication device," to facilitate access to the memory (22) by a host process operating on the said PED (10) when the said MMD (16) is connected to the said PED (10) via the said MMI (18). See paragraph [0017,0021, 0024].

However, Becker et al. fails to clearly teach wherein memory comprises non-volatile memory.

Arnouse discloses in paragraphs [0024, 0028-0029] of a non-volatile memory.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a non-volatile memory capable of not losing information when power is not applied to the unit.

Regarding **claim 17**, according to **claim 16**, wherein Becker et al. fails to clearly disclose wherein storing sensor data comprises storing sensor data into at least a first portion of the memory, and wherein accessing the sensor data from the memory comprises accessing the sensor data from at least the first portion of the memory.

Arnouse discloses in paragraphs [0118, 0121 and 0136], wherein storing sensed data in a compartment, which reads on claimed "at least a first portion of the memory," and wherein accessing the sensor data from the memory comprises accessing the sensor data from one of the said compartments of the memory.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to store information into designated areas or files on the said memory card for easy retrieval of information.

Regarding **claim 18**, according to **claim 16**, Becker et al. fails to clearly disclose storing sensor data comprises mapping sensor data from the memory into a defined portion of the removable memory card, and wherein accessing the sensor data from the memory by the host process comprises accessing the sensor data from the defined portion of the removable memory card.

Arnouse discloses storing sensor data comprises mapping sensor data from the memory into a defined portion of the removable memory card, and wherein accessing the sensor data from the memory by the host process comprises accessing the sensor data from the defined portion of the removable memory card. See paragraph [0134].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to store information into designated areas or files on the said memory card for easy retrieval of information.

Regarding **claim 19**, according to **claim 18**, Becker et al. fails to clearly disclose wherein mapping sensor data comprises enabling a bridge to deliver the sensor data from the registers to the defined portion of the said card.

Arnouse discloses in paragraph [0134] the delivery of the sensed data from the sensor register to the defined portion of the removable memory card.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S.

2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to store information into designated areas or files on the said memory card for easy retrieval of information.

Regarding **claim 20**, according to **claim 19**, Becker et al. fails to clearly disclose wherein accessing the sensor data from the memory comprises enabling the bridge to deliver the sensor data from the defined portion of the removable memory card to the host process.

Arnouse discloses in paragraph [0134] wherein accessing the sensor data from the memory comprises enabling the bridge to deliver the sensor data from the defined portion of the removable memory card to the host process.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to store information into designated areas or files on the said memory card for easy retrieval of information.

Regarding **claim 21**, according to **claim 19**, Becker et al. fails to clearly disclose wherein disabling the bridge to facilitate non-sensor-related memory transactions with the removable memory card from address locations not within the defined portion of the removable memory card.

Arnouse discloses in paragraph [0126 and 0134] wherein disabling the bridge to facilitate non-sensor-related memory transactions with the removable memory card from address locations not within the defined portion of the removable memory card.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Becker et al. Patent Publication Number (U.S. 2004/0127255 A1) in view of Arnouse Patent Publication Number (U.S. 2005/0010796 A1) in order to provide a means to store information into designated areas or files on the said memory card for easy retrieval of information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2686

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches
May 9, 2005

Marsha D Banks-Harold

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